1. Private Line Service

1.1 Description

Rates and charges for services explained herein are contained in Part M, Section 2.

1.1.1	General	
A.	Private line service is that of furnishing facilities for communications between specified locations.	
В.	Private line service is classified by Series and further classified within each Series by Types. Series and their types are described in Section 2 in terms of characteristics and use.	
C.	The private line services furnished are provided over routes elected by the Telephone Company. When the customer requests special channel routing or sequence of connection, the mileages are based upon the conditions involved.	
D.	A private line may be used for different types of transmission simultaneously in accordance with the normal transmission characteristics of such private line, subject to the following.	
1.	When used for remote operation of a mobile radio-telephone system, it may be used simultaneously for voice communication and to transmit more than one tone in sequence or simultaneously for control purposes.	
2.	When used for control, metering or signaling purposes, it may be used to transmit more than one tone in sequence or simultaneously for such purposes.	
E.	Additional Channels may be created from a channel provided for private line services as follows.	
1.	Customers, authorized users, or joint users, by use of their own equipment, and in accordance with the normal transmission characteristics of the private line, may create additional channels from channels furnished by the Telephone Company if the channels created are used for remote operation of mobile systems, or for remote metering, supervisory control, or signaling purposes.	
2.	Customers, authorized users, or joint users by use of their own equipment, and in accordance with the normal transmission characteristics of the grade of channel ordered, may create additional channels for any type of communication, except as specified in Item 1, by subdividing a channel of a Type number lower than 5500 or a Type 10001. However, such channels may not be created from a voice grade private line used for telephoto or facsimile transmission. The use of channel derivation devices to create additional channels from channels furnished by the Telephone Company is subject to the regulations regarding connection of customer premises equipment in Section 1.7.	
a.	The Telephone Company makes no representation as to the suitability of the channels provided by it for subdivision into additional channels by the customer.	

1. Private Line Service

1.2 Regulations

The regulations contained herein are in addition to the General Regulations contained in Part A, Section 1.

1.2.1 Minimum Periods

- A. The minimum service period for private line service, except for Series 6000 channels, is one month. However, a longer contract period may be required where unusual costs are involved to furnish service.
- 1. The minimum service period for Series 6000 channels is specified in Section 2. However, a longer period may be required where unusual costs are involved to furnish service.

1.2.2 Cancellation of Service

- A. Upon nonpayment of any sum due the Telephone Company or upon a violation of any of the conditions governing the furnishing of a service or channel, the Telephone Company may, by notice in writing to the customer without incurring any liability, discontinue the furnishing of the service or channel and terminate the contract.
- **B.** When the customer of record cancels an application for service prior to the start of installation or construction of facilities tariff general regulations apply.

1.2.3 Transfer of Service

A. The service or any rights associated therewith may not be assigned or transferred in any manner.

1.3 Use of Service

1.3.1 General

- A. Private lines may be used for one or more of the following purposes.
- 1. For the transmission of communications to or from the customer and relating directly to the customer's business.
- 2. For the transmission of communications to all stations simultaneously which relate directly to matters of common interest to the customer and the authorized users when those connected to the service are all in the same general line of business.
- 3. For the transmission of communications relating directly to the business of a subsidiary corporation over which the customer exercises control through the ownership of more than 50% of the voting stock.
- 4. For the transmission of communications to or from any station on a service furnished to a Department or Agency of the United States Government when the head of the Department or Agency or a duly authorized representative notifies the Telephone Company in writing that the use is intended only for official United States Government business.
- 5. When the use of the service relates to coordination or exchange of electrical pooled power for the transmission of communications between any two or more stations of such service or similar services furnished to others who are parties to the coordinating or exchange arrangement.
- 6. For the transmission of communications to, from, within, and between air carriers if the customer is an aeronautical communications company licensed under the Aviation Services rules of the FCC to operate stations in the aeronautical mobile and fixed services.

1.3.2 Lawful Use

A. Private line service is not to be used for an unlawful purpose.

1.3.3 Alternate Use

- **A.** Certain private line services may be used for different types of transmission on an alternate use basis. Except as provided therein, facilities furnished under this tariff may be used for other communications purposes for which they are suited, subject to the following provisions.
- 1. The purpose for which the private line service is to be used must be made known to the Telephone Company prior to such use.
- 2. The frequency range, speed, and other characteristics of signals transmitted must fall within those specified for the channel furnished.
- 3. Station equipment and station wiring in connection with alternate use is provided by the customer, authorized user, or joint user.

Private Line Service Use of Service 1.

1.3

1.3.3	3 Alternate Use		
A.	(Continued)		
4.	Connection of channel facilities to other facilities furnished by the Telephone Company may not be set up at central office switchboards, Private Branch Exchange (PBX), or other switching arrangements if the connection involves a use other than that for which the switchboards or other switching arrangements are furnished.		
5.	If the purpose for which the channel facilities are to be used requires a type of channel for which a higher rate applies than for the other purpose, the higher channel rate applies.		
В.	Subject to the provisions contained herein, the Telephone Company will provide private line service to permit the customer to use the service for different types of transmission on an alternate use basis. Regulations applicable to a particular type of operation apply during the period the service is used for that type of operation.		
C.	The customer may at will switch from one type of operation to another but only one type of operation can be used at one time.		
D.	Alternate use is available on two point services. On services involving more than two points, alternate use is permitted where facilities permit.		
E.	Foreign exchange service operation is available only on two point services.		
F.	2001 Channels		
1.	The arrangement to switch from private line to foreign exchange service at each of the two service points for voice private line service used alternately as a channel in connection with foreign exchange requires a Type 1001 channel between the customer's premises and the rate center.		
2.	The intercept arrangement to permit calls made to the foreign exchange line to be received at the customer's location in the foreign exchange only during the period that the service is in use as a voice private line service is provided in accordance with the local channels specified in Section 2.		
3.	Voice and teletypewriter, voice and remote metering, and voice and data alternate uses require a Type 2001A or 2001B channel when a PBX station line or tie line is involved. When alternate use for voice is indicated, the voice use permitted is that for which Types 2001, 2001A, or 2001B (when a PBX extension or tie line is involved) channels are furnished.		

1.3 Use of Service

1.3.3 Alternate Use

- G. Alternate use arrangements for use with services utilizing Series 5000 channels having a Type number less than 5500 are furnished at charges which are the same as those specified for Series 1000, 2000 and 3000, except that the charges applicable for the type of channel furnished are the monthly charges for the comparable type of Series 5000 channel. Alternate use arrangements for use with services utilizing Series 5000 channels having a Type number greater than 5500 are as follows.
- 1. Type 1—For use to permit base capacity equivalent to 12 or 60 voice grade channels to be alternately used with Type 5500 service terminals or as a number of channels or lesser capacity, provided that the alternate use is limited to the capacity within a two point section, or multi-point sections where the base capacity of which alternate use is desired has neither intermediate service terminals nor intermediate connections to other channels associated with the base capacity (or portion thereof) arranged for alternate use.
- 2. At each terminal of a section or group of sections arranged for the alternate use of base capacity equivalent to 12 voice channels or 60 voice channels.
- 3. At each terminal of a section or group of sections so arranged, a service terminal or connecting arrangement for each of the two types of operation is required for each channel arranged for use within the alternately used capacity.
- H. Service charges apply in addition to rates for alternate use, and to all other applicable rates and charges for the associated equipment.
- I. Transfer keys are provided by the customer.

1.3.4 Joint Use

- **A.** If a private line service is arranged for joint use as specified herein, the joint user is permitted to use the service in the same manner as the customer.
- B. Joint use arrangements are offered on interexchange private line services utilizing Series 1000, 2000 or 3000 channels and equipment except those services utilizing a Type 2006 channel, or a Type 2001 channel used alternately as a channel in connection with foreign exchange service or in connection with a Type 2001A channel utilized for bridged main telephone extension line service. Joint use as specified herein is not offered on those services utilizing, in whole or in part, Series 5000, 6000 or 10000 channels or on private line services and channels set forth in Section 2.
- C. A joint user must have a station and a local channel on the private line and the station must be located on the premises of the joint user, except that these requirements do not apply to a joint user of a private line with respect to his use of additional channels created by the customer from the private line provided a joint user has a station on a channel connected in accordance with Sections 1.7.5, 1.7.6 and Section 1.7.7 to the channel created by the customer.

- 1. Private Line Service
- 1.3 Use of Service

1.3.4 Joint Use

- D. The Telephone Company is not responsible for the manner in which the joint use of the service is allocated. Orders involving the start, rearrangement, release, or discontinuance of service will be accepted by the Telephone Company only from the customer.
- E. All charges for the service, including the charges for the joint use arrangement, and local channels, furnished for the joint users as part of the private line service, will be computed as though the service were to be billed to the customer. The customer and each joint user will be billed for the components of the service which are furnished exclusively to each of them for his individual use. The charges for components of the service which are jointly used will be allocated for billing purposes in accordance with percentages of use specified by the customer. The specified percentages will remain in effect for a minimum of one month and the percentages on file on the first day of the customer's billing cycle will be used in computing that month's billing. Without affecting the customer's ultimate responsibility for payment of all charges for the service, each joint user is responsible for the payment of the charges billed to him in accordance with the regulation contained herein.

1.4 Responsibility of the Telephone Company

1.4.1 Liability The Telephone Company is not responsible for damages arising out of mistakes, omissions, interruptions, delays, or errors or defects in transmission, except those caused either by its failure to furnish facilities suitable for ordinary telephone service or by its failure to maintain and operate the facilities in a manner proper for telephone service. The liability of the Telephone Company for damages caused either by its failure to furnish facilities suitable for ordinary telephone service or by its failure to maintain and operate the facilities in a manner proper for telephone service cannot exceed an amount equivalent to the proportionate charge to the customer for the period of service during which such mistake, omission, interruption, delay, or error or defect in transmission occurs. Loss of profits by the applicant or subscriber is not considered an element of damage for which the Telephone Company is liable. The Telephone Company is not liable for any defacement of, or damage to the premises of a customer, authorized user, or joint user resulting from the furnishing of channel facilities, or from the attachment of the equipment and associated wiring furnished by the Telephone Company on the premises or by the installation or removal thereof, if defacement or damage is not the result of negligence of the agents or employees of the Telephone Company. The Telephone Company is indemnified and saved harmless by the customer against the following claims. Claims for libel, slander, or the infringement of copyright arising directly or indirectly from the material transmitted over the facilities or the use thereof. Claims for infringement of patents arising from combining apparatus and systems of the customer with, or using them in connection with facilities furnished by the Telephone Company. All other claims arising out of any act or omission of the customer in connection with the facilities provided by the Telephone Company.

1.4.2 ScopeA. Private line service may be limited in order to comply with orders issued under

wartime authority of the President of the United States.

B. The Telephone Company does not undertake to transmit messages.

1.4.3 Manner of ProvisionA. Unless otherwise indicated, service is furnished 24 hours per day, seven days per

week.

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Private Line Service Responsibility of the Telephone Company 1.4

1.4.3	Manner of Provision	
В.	Private line service is provided if suitable facilities are and continue to be available. If a shortage of facilities exists at any time, either for a temporary or a protracted period, the establishment of exchange service and Message Telecommunications Services (MTS) takes precedence over all other services and uses.	
C.	The Telephone Company will attempt, but cannot guarantee, to secure the facilities of other companies if required to furnish a service or channel to a customer.	
D.	In view of the fact that the customer has exclusive control of his communications over the facilities furnished by the Telephone Company and of the other uses for which facilities may be furnished by the Telephone Company, and because of unavoidableness of errors incident to the services and to the use of the facilities of the Telephone Company, the services and facilities furnished by the Telephone Company are subject to the terms, conditions and limitations specified herein.	
E.	The Telephone Company provides all facilities necessary for private line service. The customer, authorized user, or joint user provides any terminal equipment or multiline terminating system for use with private line service as specified elsewhere in Part B.	
F.	The Telephone Company provides one suitable termination of a private line on the premises of the customer, authorized user, or joint user. Additional terminations must be provided by the customer.	
G.	The Telephone Company undertakes to maintain and repair the facilities that it furnishes.	
H.	The Telephone Company does not provide private line service as an extended line to an additional point in the same building or another building on the same premises or exclusively between points on the same premises of a customer, authorized user, or joint user.	
1.	Service arrangements for extended lines or lines exclusively between points on the same premises, installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.	
I.	Construction—The regulations applicable to construction for private line service are specified in Part A, Section 2. The type of construction, when provided by the Telephone Company, and its routing are at all times determined by the Telephone Company, and ownership of the construction remains vested in the Telephone Company.	

1.5 Responsibility of the Customer

1.5.1	Liability	
A.	No carrier participating in this service is liable for any act or omission of any other carrier also participating in the service.	
В.	The customer indemnifies and holds the Telephone Company harmless from any and all loss, claims, demands, suits, or other action, or any liability whatsoever, whether suffered, made, instituted, or asserted by the customer or by any other party or persons, for any personal injury to or death of any person or persons, and for any loss, damage, or destruction of any property, whether owned by the customer or others, caused or claimed to have been caused directly or indirectly by the installation, operation, failure to operate, maintenance, removal, presence, condition, location, or use of equipment provided by the customer in hazardous locations. The Telephone Company may require each customer to sign an agreement for the furnishing of facilities as a condition precedent to the furnishing of private line service.	
C.	The customer is responsible for damages to facilities of the Telephone Company caused by the negligence or willful act of the users.	
D.	The customer is responsible for reimbursing the Telephone Company for any loss through theft of Telephone Company property on the premises of the customer.	

1.5.2 Establishing Identity

A. The customer is responsible for establishing his identity in the course of any communication as often as necessary, and establishing the identity of the person or persons with whom connection is made at the called station.

1.5.3	Equipment, Space and Power	
A.	The customer is responsible for ensuring the provision of the power required to operate Telephone Company facilities installed on the premises of the customer, authorized user, or joint user.	
В.	The customer is responsible for the provision of space on-premises for Telephone Company equipment, where necessary.	
C.	The customer is responsible for the provision, installation, and maintenance of sealed conduit with explosive-proof fittings in explosive atmospheres and points outside the hazardous area where connection may be made with regular facilities of the Telephone Company.	
D.	Teletype Transmission —When a private line is used for teletypewriter transmission, the teletypewriter equipment is provided by the customer, authorized user, or joint user, and must operate at a line signaling speed not to exceed that specified for the channel facilities furnished. It is the customer's responsibility to insure the continuing compatibility of the equipment with the private line service furnished by the Telephone Company.	

- 1. Private Line Service
- 1.5 Responsibility of the Customer

1.5.3 Equipment, Space and Power

E. Data Transmission—When a private line is used for data transmission that requires terminal equipment/data sets, the data sets are provided by the customer, authorized user, or joint user. It is the responsibility of the customer to insure the continuing compatibility of the data sets with the private line service furnished by the Telephone Company.

1.5.4 Service Affecting Activities

- A. The customer is responsible for obtaining permission for Telephone Company agents or employees to enter the premises of the customer, authorized user, or joint user at any reasonable hour for the purpose of installing, inspecting, repairing, or upon termination of the service, removing the facilities of the Telephone Company.
- B. The customer is responsible for making Telephone Company facilities available for maintenance purposes at a time agreeable to both the Telephone Company and the customer. No allowance is made for the period during which service is interrupted for this purpose.

- 1. Private Line Service
- 1.6 Service Interruptions

1.6.1 General

A. When service is interrupted due to causes other than the negligence of the customer, or the failure of facilities furnished by the customer, a credit allowance is made as specified within this subsection, for the portion of the service which is affected, provided that the interruption is brought to the attention of the Telephone Company within ten days. For the purpose of determining the amount of allowance, every month is considered to have 30 days. MTS furnished at the customer's request while service is interrupted is charged for at MTS rates.

1.6.2 Series 1000, 2000 and 3000 Channels

- A. Intraexchange Services—A credit is not provided for interruptions to service of less than 24 hours. Interruptions of 24 hours or over are credited to the customer at the proportionate monthly charge in per diem multiples for each day or fraction thereof of interruption.
- B. Interexchange Services—A credit is not provided for interruptions to service of less than 30 minutes. Interruptions of 30 minutes or over are credited to the customer at the proportionate monthly contract charge in half hour multiples for each half hour or fraction thereof of interruption.

1.6.3 Series 5000 Channels

When service is interrupted for a period of two hours or more, credit is provided for the portion of the service affected by the interruption in hourly multiples for each hour or major fraction thereof of interruption as follows.

- A. For items other than base capacity, credit is provided in the proportion that the period of interruption bears to the hours in a month.
- B. For each of the several types of base capacity, credit is computed separately for each two point section affected where the base capacity is furnished for use as a single channel, credit is allowed as set forth in Section 1.6.3A or, where the base capacity is furnished for use as individual channels of lesser individual capacity, the following is applicable.
- 1. If the equivalent voice grade channels interrupted in a section are less than 50% of the total equivalent voice grade channels arranged for use in the section, a credit is not provided.
- 2. If the equivalent voice grade channels interrupted in a section are 50% or more of the total equivalent voice grade channels arranged for use in the section, credit is provided as set forth in Section 1.6.3A.

Private Line Service Service Interruptions

1.6.4 Series 6000 Channels When use of facilities is interrupted for a period of 30 seconds or more, due to any cause other than the negligence of the customer or the failure of facilities provided by the customer, credit is provided in multiples of five minutes for each five minutes or fraction thereof of interruption, except that two or more interruptions occurring during any period of five consecutive minutes are considered one interruption. The amount of the credit is equal to that portion of the difference between the charge (monthly or per occasion as the case may be) for the complete service and the charge which would be applicable to that portion of the service not affected by the interruption that the period of interruption to be allowed for represents of the total time upon which the charge is based (monthly or per occasion as the case may be) except that, in applying this regulation to charges for local channels and to charges for station connections in connection with Types 6004 and 6006, and to charges for bridging connections in connection with Type 6002 in any month when the maximum charges for such station or bridging connections do not apply, the total number of hours for which service is requested in the month are used in lieu of the total time upon which the charge is based. When use of local channel facilities within a program exchange area not associated with interexchange channels is interrupted for a period of 30 minutes or more, credit is allowed to the customer at the proportionate monthly contract charge in half-hour multiples for each half hour or major fraction thereof of interruption. Credit is not allowed for interruptions of less than 30 minutes.

1.7

1. Private Line Service

Connection to Private Line Service

1.7.1 Responsibility of the Telephone Company

- A. The responsibility of the Telephone Company is limited to the furnishing of service components suitable for private line services and to the maintenance and operation of service components in a manner proper for private line services. Subject to this responsibility the Telephone Company is not responsible for the following.
 - 1. The through transmission of signals generated by terminal equipment or multi-line terminating systems or for the quality of or defects in transmission.
 - 2. The reception of signals by terminal equipment or multi-line terminating systems.
- 3. Address signaling where the signaling is performed by tone-type signaling equipment.
- B. The Telephone Company will, at the customer's request, provide information concerning interface parameters, including the number of ringers which may be connected to a particular line, needed to permit terminal equipment to operate in a manner compatible with the telecommunications network.
- C. The Telephone Company may make changes in its telecommunications network, equipment, operations, or procedures, where it is not inconsistent with Part 68 of the FCCs rules and regulations. If the changes can be reasonably expected to render any terminal equipment or multi-line terminating system incompatible with the telecommunications network, or require modification or alteration of the terminal equipment or multi-line terminating system, or joint user, or otherwise materially affect its use or performance, the customer, authorized user, or joint user will be given adequate notice in writing, to allow maintenance of uninterrupted service.

1.7.2 Responsibility of the Customer

- A. The customer authorized user, or joint user is responsible for the installation, operation, and maintenance of any terminal equipment or multi-line terminating system. Upon notice from the Telephone Company that terminal equipment or multi-line terminating system is causing hazard, damage, malfunction or degradation of service, the customer, authorized user, joint user, or sharer must make necessary changes as to remove or prevent hazard, damage, malfunction, or degradation of service. No combination of terminal equipment, multi-line terminating system, or facilities can result in the following situations.
- 1. Require change in or alteration of the equipment or services of the Telephone Company
- 2. Cause electrical hazards to Telephone Company personnel
- 3. Cause damage to Telephone Company equipment
- 4. Cause malfunction of Telephone Company billing equipment
- 5. Cause degradation of service to persons other than the user of the subject terminal equipment or multi-line terminating system, his calling or called party.

1. Private Line Service

1.7 Connection to Private Line Service

1.7.3 Recording of Two-Way Telephone Conversations

A. Private line services are not represented as adapted to the recording of two-way telephone conversations. When voice recording equipment is used with a private line service connected to telecommunications services, the provisions relating to recording of two-way telephone conversations, as specified in Part A, Section 4 are applicable to the private line service.

1.7.4 Violation of Regulations

A. If any terminal equipment, multi-line terminating system, or inside wire provided by a customer, authorized user, or joint user is used with private line services in violation of any of the provisions of this tariff, the Telephone Company will take immediate action to protect the telecommunications network and Telephone Company employees and will promptly notify the customer of the violation in writing. Within ten days of receipt of this notice, the customer must confirm in writing to the Telephone Company that the use of the terminal equipment, multi-line terminating system, or inside wire has been discontinued or the violation corrected. Failure to do this will result in suspension of the service until such time as there is compliance with the provisions of this tariff.

1.7.5 Connections of Registered Equipment

- A. The connection may be made only at the customer's premises to Series 2000 or Series 3000 Private Line service (including the appropriate Series 5000 equivalents) that present a two-wire or four-wire loop signaling interface for connection under the following conditions.
- 1. Registered terminal equipment, registered protective circuitry, and registered key telephone systems may be connected to the station end of private line services furnished in connection with off-premises stations.
- 2. Registered PBX systems may be connected, as a trunk termination, to the station end of private line services furnished in connection with off-premises stations.
- B. A Type 2006 channel (including its appropriate Series 5000 equivalent) may be utilized with registered terminal equipment, registered protective circuitry, and registered multi-line terminating systems which are connected to the exchange telephone service associated with the channels described in Section 1.7.5A.
- C. The connection of registered terminal equipment and registered PBX systems may be made only at the customer's premises to a Series 2000 or Series 3000 private line service (including their appropriate Series 5000 equivalents) that presents an interface for either two-wire or four-wire transmission, with separate E&M signaling leads conventionally known as Type I (battery/ground) or Type II (contact closure type). E&M signaling leads are terminal equipment or PBX leads (other than voice or data communications leads) used for the purpose of transferring supervisory or address signals across the interface.

1.7 Connection to Private Line Service

1.7.5 Connections of Registered Equipment

D. The connection of customer provided registered terminal equipment and registered PBX systems may be made only at the customer's premises to a Series 1000 or Series 2000 private line service furnished to provide indications of message registration of outgoing calls or automatic identification of outward dialing (AIOD) to the equipment or systems. In addition, customers who intend to install, perform additions to, or make rearrangements of AIOD functions must give advance notice to the Telephone Company in accordance with the procedures specified in Part 68 of the FCCs rules and regulations or as otherwise authorized by the FCC.

1.7.6 Connections of Grandfathered Terminal Equipment and Grandfathered Multiline Terminating Systems Connections Through Connecting Arrangements Furnished by the Telephone Company

Grandfathered connections of terminal equipment and grandfathered connections of multiline terminating systems to the private line services specified herein are subject to the regulations contained in Part A, Section 4.

- A. Network control signaling is performed by connecting equipment furnished, installed, and maintained by the customer.
- B. Connections specified must comply with the minimum protection criteria.
- C. Connecting arrangements are not required and minimum protection criteria are not applicable when terminal equipment or multi-line terminating systems are connected with certain specified channels and are used for the types of transmission specified herein due to the nature of the service provided and/or the type of channels and equipment used. Those channels are Type 1001 and Type 1005, Type 2002, Type 5101 through Type 5106, Type 5202, and Series 6000.
- D. Except as otherwise provided for connections of registered equipment and unless otherwise stated herein, terminal equipment and multi-line terminating systems may be electrically connected to private line services subject to the following. Terminal equipment or multi-line terminating systems connected in accordance with the following, must comply with minimum protection criteria.
- 1. When the terminal equipment or multi-line terminating system is connected with private line service furnished by the Telephone Company and the private line service is not arranged for connection to telecommunications services, the connection must be made to an interface provided by the Telephone Company.
- 2. When the terminal equipment or multi-line terminating system is connected with private line service furnished by the Telephone Company and the private line service is arranged for connection to telecommunications service, the connections must be made through a connecting arrangement, except as otherwise specified in Section 1.7.10 as provided herein and the connection must be made so that the functions of network control signaling are performed by equipment furnished by the customer.

1.7 Connection to Private Line Service

1.7.6 Connections of Grandfathered Terminal Equipment and Grandfathered Multiline Terminating Systems Connections Through Connecting Arrangements Furnished by the Telephone Company

- E. Data terminal equipment (including telephotograph equipment) may be connected at the customer's premises to private line service through a data access arrangement provided by the Telephone Company in accordance with the following when private line service is arranged as provided in Section 1.7.6D. The customer must furnish the equipment which performs the functions of conditioning the data signals generated by the terminal equipment to signals suitable for transmission by means of Telephone Company services, and conditioning signals transmitted by means of Telephone Company services to data signals suitable for reception by the equipment.
- 1. When a data access arrangement is furnished in connection with terminal equipment used for both voice and data communication, the data access arrangement may be used to connect the terminal equipment for voice communication.
- F. Voice terminal equipment may be connected at the customer's premises to private line service arranged as provided in Section 1.7.6D providing that the connection must be made through a connecting arrangement furnished by the Telephone Company, and when a data access arrangement is furnished in connection with terminal equipment used for both voice and data communication, the data access arrangement may be used to connect the terminal equipment for voice communication.
- G. Attested equipment and conforming answering devices may be used with private line service subject to the provisions of Part A, Section 4.

1.7.7 Connections of Grandfathered Terminal Equipment and Grandfathered Multiline Terminating Systems-Direct Connections

A. Grandfathered terminal equipment and grandfathered multi-line terminating systems, directly connected to the private line services specified in Section 1.7.5 and are subject to the regulations contained in Part A, Section 4. These connections are subject to the minimum protection criteria.

1.7.8 Electrical Connections

A. Minimum Protection Criteria—Since private line services utilize Telephone Company channels and equipment in common with other services it is necessary, in order to prevent excessive noise and crosstalk, that the power of the signal applied to the Telephone Company private line service be limited. Because each private line service is individually engineered, a single valued limited for all applications cannot be specified. Therefore, the power of the signal in the band above 300 Hz which may be applied by the equipment to the interface will be specified by the Telephone Company for each power allowed on the telecommunications network.

1. Private Line Service

1.7 Connection to Private Line Service

1.7.8 Electrical Connections

- **B.** To protect other services, the signal applied by the equipment to the Telephone Company interface on the customer's premises must meet the following limits.
- 1. The power in the band from 3,995 Hz to 4,005 Hz must be at least 18db below the power of the signal as specified in Section 1.7.8A.
- 2. The power in the band from 4,005 Hz to 10,000 Hz must not exceed 16db below one milliwatt.
- 3. The power in the band from 10,000 Hz to 25,000 Hz must not exceed 24db below one milliwatt.
- 4. The power in the band from 25,000 Hz to 40,000 Hz must not exceed 36db below one milliwatt.
- 5. The power in the band above 40,000 Hz must not exceed 50db below one milliwatt.
- C. When there is connection to telecommunications services, to prevent the interruption or disconnection of a call, or interference with network control signaling, the signal applied by the equipment to the Telephone Company interface on the customer's premises must at no time have energy solely in the 2,450 to 2,750 Hz band. If signal power is in the 2,450 to 2,750 Hz band, it must not exceed the power present at the same time in the 800 to 2,450 Hz band.

1.7.9 Acoustic or Inductive Connections

- A. Voice or data terminal equipment (including telephotograph equipment) may be acoustically or inductively connected at the customer's premises to a private line service provided the acoustic or inductive connection is made externally to the network control signaling unit provided by the customer.
- B. Multi-line terminating systems may be acoustically or inductively connected with private line service as specified in Section 1.7.9A provided the acoustic or inductive connection is made externally to the network control signaling unit provided by the customer. Multi-line terminating systems may be connected at a premises of the customer or authorized user when the customer has a regular and continuing requirement for the origination or termination of communications over the multi-line terminating systems provided that following apply.
- 1. The normal mode of operation of the multi-line terminating system is to provide communications originating or terminating at the premises on which the connection is made.
- 2. The connection is made to channels of a Type number lower than 5500 or to Series 10000 channels furnished by the Telephone Company.

- 1. Private Line Service
- 1.7 Connection to Private Line Service

1.7.9 Acoustic or Inductive Connections

- C. At the customer's request and where a private line is arranged for joint use a joint user of private line service may acoustically or inductively connect his own multi-line terminating system to a jointly used private line on the same basis as the customer, as specified in Section 1.7.9B.
- D. Tone-type address signaling is permitted through acoustic or inductive connections, however, the services of the Telephone Company are not designed for this use and the Telephone Company makes no representation as to the reliability of address signaling which is performed in this manner.
- E. Minimum Protection Criteria—Since private line service utilizes Telephone Company channels and equipment in common with other services it is necessary, in order to prevent excessive noise and cross talk, that the power of the signal applied to the Telephone Company private line service be limited. Because each private line service is individually engineered a single valued limit for all applications cannot be specified. Therefore, the power of the signal which may be applied by the equipment to the interface will be specified by the Telephone Company for each application to be consistent with the signal power allowed on the telecommunications network. To protect other services, it is necessary that the signal applied by the equipment to the interface on the customer's premises must meet the following limits at the output of the network control signaling unit.
- 1. The power in the band from 3,995 Hz to 4,005 Hz must be at least 18db below the power of the signal as specified in Section 1.7.9E.
- 2. The power in the band from 4,005 Hz to 10,000 Hz must not exceed 16db below one milliwatt.
- 3. The power in the band from 10,000 Hz to 25,000 Hz must not exceed 24db below one milliwatt.
- 4. The power in the band from 25,000 Hz to 40,000 Hz must not exceed 36db below one milliwatt.
- 5. The power in the band above 40,000 Hz must not exceed 50db below one milliwatt.
- F. When there is connection to telecommunications services, to prevent the interruption or disconnection of a call, or interference with network control signaling, it is necessary that the signal applied by the equipment to the voice transmitting and receiving equipment located on the customer's premises be limited so that the signal at the output of the voice transmitting and receiving equipment must at no time have energy solely in the 2,450 to 2,750 Hz band. If there is signal power at the output of the voice transmitting and receiving equipment in the 2,450 to 2,750 Hz band, it must not exceed the power present at the same time in the 800 to 2,450 Hz band.

1. Private Line Service

1.7 Connection to Private Line Service

1.7.9 Acoustic or Inductive Connections

- G. A multi-line terminating system provided by an authorized user may be acoustically or inductively connected at the premises of the authorized user with Telephone Company facilities for private line service, on which the authorized user has a station, provided that the following apply.
- 1. The normal mode of operation of the multi-line terminating system is to provide communications originating or terminating at the premises on which the connection is made.
- 2. The connection is made to channels of a Type number lower than 5500 furnished by the Telephone Company.
- 3. The customer has a regular and continuing requirement for communications originating or terminating at the authorized user's premises at which the connection is made.
- 4. The connection is made on the same basis as specified for the customer in Section 1.7.9B.
- 5. All communications over the interconnected facilities must be between the customer and authorized user and relate directly to the customer's business.

1.7.10 Connections of Customer Provided Communications Systems Not Subject to Part 68 of the FCCs Rules and Regulations

- A. Customer provided communications systems other than multi-line terminating systems connected pursuant to Section 1.7.5 and Section 1.7.6 (including channels derived from the systems), not exceeding voice grade, may be connected at the customer's, authorized user's, or joint user's premises where the customer has a regular and continuing requirement for the origination or termination of communications over the customer provided communications system provided that the following apply.
- 1. The normal mode of operation of the customer provided communications systems is to provide communications originating or terminating at the premises on which the connection is made.
- 2. The connection is made through switching equipment provided by the customer or authorized user.
- 3. The connection is made to channels of a Type number lower than 5500 furnished by the Telephone Company or to channels created therefrom in accordance with the provisions for additional channels, and when the private line service is arranged as provided in Section 1.7.6D2, the connection is made through the following arrangement or equipment.
- **a.** A connecting arrangement furnished by the Telephone Company, or

1. Private Line Service

1.7 Connection to Private Line Service

1.7.10 Connections of Customer Provided Communications Systems Not Subject to Part 68 of the FCCs Rules and Regulations

A. 3. (Continued)

- b. Registered or grandfathered terminal equipment, protective circuitry, or multi-line terminating systems subject to Part 68 of the FCCs rules and regulations which, either singularly or in combination, assures that all the requirements of Part 68 are met at the private line service interface, or
- c. The circuitry, equipment, or systems, specified in Section 1.7.10A2 which assures that all the requirements, except signal power control, of Part 68 are met, provided the customer complies with the regulations for institutional procedures.
- B. Institutional Procedures—The customer provided communications system must be installed, operated, and maintained so that the signal power (within the frequency range of 200–4,000 Hz) at the private line service interface continually complies with Part 68 of the FCCs rules and regulations. The operator/maintainer responsible for the establishment, maintenance, and adjustment of the voice frequency signal power present at the private line service interface must be trained to perform these functions by successfully completing one of the following courses.
- 1. A training course provided by the manufacturer of the equipment used to control voice frequency signal power.
- 2. A training course provided by the customer, authorized user or joint user who has responsibility for the entire communications system not subject to Part 68, using training materials and instructions provided by the manufacturer of the equipment used to control the voice frequency signal power.
- 3. An independent training course (e.g., trade school or technical institution) recognized by the manufacturer of the equipment used to control the voice frequency signal power; or in lieu of the preceding training requirements, the operator/maintainer is under the control of a supervisor trained in accordance with the preceding courses.
- C. At least ten days advance notice, in the form of a notarized affidavit, must be given to the Telephone Company before the initial connection of a customer provided communications system. A copy of the affidavit must also be maintained at the customer's premises. The affidavit must contain all of the following information.
- 1. The full name, business address, and telephone number along with the signature of the customer, authorized user or joint user who has responsibility for the operation and maintenance of the communications system.
- 2. Information identifying the lines to which the communications system will be connected to or arranged for connection to.
- 3. A statement indicating all operations associated with establishment, maintenance, and adjustment of the signal power present at the private line service interface will comply with Part 68.

1. Private Line Service

1.7 Connection to Private Line Service

1.7.1	Connections of Customer Provided Communications Systems Not Subject to Part 68 of the FCCs Rules and Regulations	
C.	C. (Continued)	
4.	A statement describing how each operator/maintainer of the communications system will meet and continue to meet the training requirements for persons installing, adjusting, or maintaining such communications systems.	
D.	Upon request, the customer is required to provide proper documentation to demonstrate compliance with the requirements specified in the institutional procedures.	
E.	When the connection of a customer provided communications systems is made pursuant to Section 1.7.10C, the following extraordinary procedures apply.	
1.	The Telephone Company may invoke extraordinary procedures to protect the private line service where one or more of the following conditions are present.	
a.	Information provided in the affidavit gives reason to believe that a violation of Part 68 or the institutional procedures is likely.	
b.	Harm has occurred and there is reason to believe this harm was a result of operations performed under the institutional procedures.	
2.	The extraordinary procedures which can be invoked by the Telephone Company, include the following actions.	
а.	Requiring the use of a connecting arrangement which either protects solely against signal power or which assures that all of the requirements of Part 68 are met at the private line service interface (this connecting arrangement may be provided by either the Telephone Company or the customer).	
b.	Discontinuing service.	
F.		
1.	The normal mode of operation of the customer provided communications system is to provide communications originating or terminating at the premises on which the connection is made.	
2.	The connection is made through switching equipment provided by the customer or authorized user.	
3.	The connection is made to service terminals furnished for the transmission of sequential synchronous signals at the rate of 40.8 kbps or for the transmission of two level sequential nonsynchronous facsimile signals.	

1.7 Connection to Private Line Service

1.7.10 Connections of Customer Provided Communications Systems Not Subject to Part 68 of the FCCs Rules and Regulations

- G. Customer provided communications systems may be connected through connecting arrangements furnished by the Telephone Company with Type 10001 channels (entrance facilities) furnished for the purpose of extending the customer provided communications system to a premises of the customer or authorized user. The Type 10001 channel or channels created therefrom in accordance with the provisions for additional channels may be connected at each customer's or authorized user's premises to other customer provided communications systems in accordance with Section 1.7.10A and Section 1.7.10B.
- H. At the customer's request, and where a private line is arranged for joint use, a joint user of private line service may connect his own communications system to the jointly used private line on the same basis as specified in Sections 1.7.6, 1.7.7, 1.7.8 and Section 1.7.10.
- I. A communications system provided by an authorized user may be connected at the premises of the authorized user to private line services furnished by the Telephone Company to a customer on which the authorized user has a station provided that the following apply.
- 1. The customer has a regular and continuing requirement for communications originating or terminating at the authorized user's premises at which the connection is made.
- 2. The normal mode of operation of the communications system is to provide communications originating or terminating at the premises on which the connection is made.
- 3. The connection is made through switching equipment provided by the customer or authorized user.
- 4. The connection is made to channels of a Type number lower than 5500 furnished by the Telephone Company or to channels created therefrom in accordance with the provisions for additional channels.
- 5. The connection is made on the same basis as set forth for the customer in Sections 1.7.6, 1.7.7 and Section 1.7.8.
- 6. All communications over the interconnected facilities must be between the customer and authorized user and relate directly to the customer's business.
- J. A communications system provided by an authorized user may be connected at the premises of the authorized user with Series 5000 wideband data services furnished to a customer provided that the following apply.
- 1. The customer has a regular and continuing requirement for communications originating or terminating at the authorized user's premises at which the connection is made.

- 1. Private Line Service
- 1.7 Connection to Private Line Service

1.7.10 Connections of Customer Provided Communications Systems Not Subject to Part 68 of the FCCs Rules and Regulations

- J. (Continued)
- 2. The normal mode of operation of the authorized user provided communications system is to provide communications originating or terminating at the premises on which the connection is made.
- 3. The connection is made on the same basis as set forth for the customer in Sections 1.7.6, 1.7.7 and Section 1.7.8.
- 4. The connection is made to service terminals furnished for the transmission of sequential synchronous signals at the rate of 40.8 kbps or for the transmission of two level sequential nonsynchronous facsimile signals.
- 5. All communications over the interconnected facilities must be between the customer and authorized user and relate directly to the customer's business.

1.7.11 Power, Pipeline and Railroad Companies

- A. Facilities of an electric power company, an oil, oil products, or natural gas pipeline company, or a railroad company, provided primarily to communicate with points located along a right-of-way (including premises of such company anywhere in cities, towns, or villages along the right-of-way) owned or controlled by the company may in lieu of the provisions of Sections 1.7.6, 1.7.7 and Section 1.7.10 be connected with services furnished by the Telephone Company subject to the regulations specified herein, and provided that the following apply.
- 1. The connections are made by means of switching or connecting equipment furnished by the Telephone Company.
- 2. The customer's facilities are connected to private line services furnished by the Telephone Company for voice transmission and utilizing a Type 2001 channel, when furnished to the same customer for communications with stations associated with the private line services provided that facilities of the customer are not connected to a local or toll central office line to form a through connection except in the following circumstances.
- a. In cases of emergency involving safety of life or property.
- b. In cases of calls originated by railroad employees under circumstances indicating need for prompt action to secure or maintain the safety, continuity, or reliability of railroad service to the public, and related to the movement of passengers, mail, property, or equipment by railroad, or the repair, maintenance, or construction of railroad rights-of-way, structures, or equipment.
- c. In cases where customer facilities serve locations where it is impracticable, because of hazard or inaccessibility, for the Telephone Company to furnish its facilities.

1. Private Line Service

1.7 Connection to Private Line Service

1.7.11 Power, Pipeline and Railroad Companies			
A. 2	A.2. (Continued)		
d.	During an interim period in cases where the customer has arranged for replacement of customer facilities with facilities of the Telephone Company.		
В.	Telephone circuits of these companies are connected to a central office line to form a through connection only via manual switching equipment, or an attendant's position of dial PBX equipment. The equipment or position may be located at either or both ends of the customer's circuit.		
C.	Connection of a customer's circuit may be established at either end of the circuit, but cannot be established at both ends simultaneously.		
D.	Customer teletypewriter or Morse, telephotograph, data transmission, remote metering, supervisory control, or miscellaneous signaling facilities are connected to private line service furnished by the Telephone Company for those purposes to the same customer.		
E.	Telephone Company provided private line services, when connected with facilities of the customer, may be used for communications of other than the customer, except that the services may be used for communications of, and be connected with, services furnished by the Telephone Company to other companies which are owned or operate as follows.		
1.	Are operated with the customer as parts of an integrated electric power, oil, oil products, natural gas systems, or railroad system under direct or common ownership or control; or		
2.	Own or operate an electric power, pipeline, or railroad system with the customer; or		
3.			
F.	Telephone Company provided private line services, when so connected, may be connected to a central office line to form a through connection for communications of other companies specified in Section 1.7.11E, including calls originated by employees of these companies as described in Section 1.7.11A2.		
G.	Terminal equipment and multi-line terminating systems connected in accordance with Section 1.7.5C and Section 1.7.11, prior to January 1, 1980, may remain connected and be moved and reconnected for the life of the equipment unless subsequently modified. New installations of terminal equipment and multi-line terminating systems subject to Part 68 of the FCCs rules and regulations connected to such private line services must meet the requirements of Part 68.		
Н.	New installations of or additions to terminal equipment and multi-line terminating systems subject to Part 68, connected to the private line services specified in Section 1.7.5 and Section 1.7.11 must meet the requirements of Part 68.		

1.7 Connection to Private Line Service

1.7.12 United States Army, Navy and Air Force

- A. Facilities of the US Army, Navy and Air Force are connected to private line services furnished by the Telephone Company when the Secretary of the appropriate Department or his authorized representative notifies the Telephone Company in writing that the connection is required for reasons of military necessity. These connections are made by means of switching or connecting equipment furnished by the Telephone Company. These connections are for voice transmission and utilize a Type 2001 channel for communications with stations associated with private line services, provided that the Department's facilities are not connected to a central office line to form a through connection except in cases of emergency involving safety of life or property, unless the facilities are provided in locations where it is impracticable for the Telephone Company to furnish its services.
- B. Teletypewriter or Morse, telephotograph, data transmission, remote metering, supervisory control, or miscellaneous signaling facilities of these Departments are connected to private line services furnished for these purposes.
- C. Terminal equipment and multi-line terminating systems connected to the private line services specified in Section 1.7.5 and in accordance with Section 1.7.12 prior to January 1, 1980, may remain connected and be moved and reconnected for the life of the equipment without registration unless subsequently modified. New installations of terminal equipment and multi-line terminating systems subject to Part 68 of the FCCs rules and regulations connected to such private line services must meet the requirements of Part 68.
- D. New installations of or additions to terminal equipment and multi-line terminating systems subject to Part 68, connected to the private line services specified in Section 1.7.5 in accordance with Section 1.7.12 must meet the requirements of Part 68.

1.7.13 Connections of Services Furnished by the Telephone Company to the Same Customer

- A. A private line may be connected to another private line if the forms of electrical communications for which they are being used are the same. These private lines may be connected, at the premises of the customer, or at the premises of the authorized user with a common service point on both private lines. Except as otherwise provided in Section 1.7.13B and 1.7.13G, the connections will be made through connecting arrangements or channel switching arrangements.
- B. Private lines for program transmission may be connected to the extent specified for Series 6000 channels in Section 2.
- C. Channels created by the customer, authorized user, or joint user in accordance with the provisions for additional channels may be connected at the customer's, authorized user's, or joint user's premises to channels of a Type number lower than 5500 or to a Type 10001 channel furnished by the Telephone Company, and to channels created therefrom. The connection is subject to the regulations contained in Sections 1.7.6, 1.7.7, 1.7.8, 1.7.9 and Section 1.7.10.

- 1. Private Line Service
- 1.7 Connection to Private Line Service

1.7.13 Connections of Services Furnished by the Telephone Company to the Same Customer

- D. A private line for voice communications utilizing a Type 2001A, Type 2001B, Type 5201A, Type 5201B channel, or other types of channels when used alternately for voice transmission and when in the voice mode, may be connected at a PBX or other switching equipment or connecting arrangements to a central office line or WATS access line to form a through connection over the private and exchange lines where facility conditions permit. It is not contemplated that more than one type of connection will be established simultaneously and transmission is not represented as adapted to more than one connection of the combined facilities at one time.
- 1. When a two point private line or a multi-point private line arranged for service solely between two points utilizing the above type channels is used for data transmission, through connections over the private and exchange lines may so be established as described above subject to the provisions of Sections 1.7.6, 1.7.7, 1.7.8, 1.7.9 and Section 1.7.10 and the rates and regulations specified in Part A, Section 4.
- E. The telecommunications network may be used in conjunction with Type 2001 or Type 5201 channels to extend the transmission and reception of pictures and similar material for publication to points not on a telephotograph network subject to the rates and regulations specified in Part A, Section 4. No direct connection of the telecommunications network will be made to the above channels at the premises of the customer except where protective connecting equipment is provided for this purpose by either the Telephone Company or the customer.
- F. A private line utilizing a Type 2001A, 2001B, 5201A, 5201B, or Type 10001 channel may be connected at a premises of the customer to a central office line or a WATS access line to form a through connection. The connection will be through switching equipment provided by the customer and will be made so that the function of network control signaling is performed by a network control signaling unit furnished, installed, and maintained by the customer subject to the provisions of Sections 1.7.6 and Section 1.7.7.
- G. Type 10001 channels may be connected to private line services on the premises of the customer where the customer or authorized user has a regular and continuing requirement for the origination or termination of communications over the customer provided communications system provided that the following apply.
- 1. The normal mode of operation of the customer provided communications system is to provide communications originating or terminating at the premises on which the connection is made.
- 2. The connection is made through switching equipment provided by the customer or authorized user, and
- 3. The connection is made to channels of a Type number lower than 5500 or to Series 10000 furnished by the Telephone Company or to channels created therefrom in accordance with the provisions for additional channels.

1. Private Line Service

1.7 Connection to Private Line Service

1.7.13 Connections of Services Furnished by the Telephone Company to the Same Customer

- H. Series 1000 or Type 5100 channels may be connected at the customer's premises to a central office line or a WATS access line through switching equipment provided by the Telephone Company or the customer. The connection will be made through a data set or a data access arrangement so that the function of network control signaling is performed by equipment furnished, installed, and maintained by the customer subject to the provisions of Section 1.7.6 and Section 1.7.7.
- I. Terminal equipment and multi-line terminating systems connected to the private line services specified in Section 1.7.5 in accordance with Section 1.7.13 prior to January 1, 1980, may remain connected and be moved and reconnected for the life of the equipment without registration unless subsequently modified. New installations of terminal equipment and multi-line terminating systems subject to Part 68 of the FCCs rules and regulations connected to such private line service must meet the requirements of Part 68.
- J. New installations of or additions to terminal equipment and multi-line terminating systems subject to Part 68, connected to the private line services specified in Section 1.7.5 in accordance with Section 1.7.13 must meet the requirements of Part 68.

1.7.14 Connections of Services Furnished by the Telephone Company to Different Customers

- A. A private line furnished to a customer may be connected in accordance with the following provisions.
- 1. With a private line furnished to a branch or agency of the United States Government for the purposes specified in Section 1.7.14B1 and Section 1.7.14B2 provided the connection is authorized by the branch or agency to whose service the connection is made and connections are made by means of connecting or switching arrangements furnished by the customer.
- 2. With a private line, local exchange central office line, or WATS access line furnished to a different customer provided the connection is made at the premises of an authorized user or joint uses as specified herein.
- 3. When connections involve the following types of use.
- a. Series 6000 channels connected for purposes of program transmission.
- **b.** The use of service as related to the coordination or exchange of electrical pooled power.

1. Private Line Service

1.7 Connection to Private Line Service

1.7.14 Connections of Services Furnished by the Telephone Company to Different Customers

A.3. (Continued)

- c. Channels of a Type number lower than 5000 when these are furnished for data transmission to one customer with connection to channels created by another customer. When such channels are furnished by the Telephone Company to one customer they may be connected to channels created by another customer provided the customer whose channel is to be so connected is a joint user of the individual channel from which the channels have been created by the other customer.
- B. The preceding connections will be provided only when the same types of channels (except when central office lines or WATS access lines are involved) are connected and the same forms of electrical communications are used over the connected channels.
- 1. When the private line is furnished to the Government for teletypewriter transmission for the collection and dissemination of weather information and the connection may be made on a receiving service basis for the reception of weather information.
- 2. When the private line is furnished to the Government for voice transmission for the collection and dissemination of information relating to air traffic control activities and similar information of public interest in connection with supervision of the flight of aircraft along civil airways.
- 3. A private line furnished to a customer may be connected to a private line furnished to a different customer and both private lines may be utilized by a joint user provided that the connections are in compliance with the following.
- **a.** The connection is made at the premises of a party who is a joint user on both of the private lines.
- **b.** The connections are through switching equipment provided by the joint user.
- c. When the private lines are so connected, all communications over the interconnected facilities must be to or from the joint user and relate directly to his business.
- C. A joint user of a private line, may connect a central office line, WATS access line, or private line provided to him as a customer to that private line on which he is a joint user provided that the connection is in compliance with the following provisions.
- **1.** The connection is made at the premises of the joint user.
- 2. The connection is made through switching equipment provided by the joint user.
- 3. When the connection involves a central office line or WATS access line, the connection is made so that the functions of network control signaling are performed by equipment furnished, installed, and maintained by the joint user.
- 4. When the private line is connected with the central office line or WATS access line, all communications over the interconnected facilities must be to or from the joint user and relate directly to his business.

1. Private Line Service

1.7 Connection to Private Line Service

1.7.14 Connections of Services Furnished by the Telephone Company to Different Customers

- D. A private line furnished to a customer may be connected to a different customer's private line if the different customer is an authorized user on the other customer's private line and provided that all communications over the interconnected private lines are between the customers and relate directly to their business. The connections must be made through switching equipment provided by the customer of authorized user. Neither of the private lines being furnished can be used for foreign exchange service.
- E. A private line furnished to a customer may be connected to a central office line furnished to a different customer provided that the customer for the central office line is an authorized user of the other customer's private line. The connection must be made through switching equipment provided by the customer or the authorized user and, the connection must be made so that the functions of network control signaling are performed by equipment furnished, installed, and maintained by the customer subject to all applicable provisions contained herein.
- F. Terminal equipment and multi-line terminating systems connected to the private line services in accordance with Section 1.7.5C and Section 1.7.14, prior to January 1, 1980, may remain connected and be moved and reconnected for the life of the equipment without registration unless subsequently modified. New installations of terminal equipment or multi-line terminating systems subject to Part 68 of the FCCs rules and regulations connected to such private line services must meet the requirements of Part 68.
- G. New installations of or additions to terminal equipment and multi-line terminating systems subject to Part 68, connected to the private line services specified in Section 1.7.5C and Section 1.7.14, must meet the requirements of Part 68.

1.7.15 Connections of Services Furnished by the Telephone Company with Certain Facilities of the Western Union Telegraph Company

- A. Interexchange private line channels furnished by the Western Union Telegraph Company to the US Department of the Army, Navy or Air Force and terminated at both ends by these Departments, or at one end by the Department and at the other end by the Telephone Company, may be connected with the Telephone Company's facilities subject to the conditions specified herein and Part A, Section 4.
- 1. Interexchange private line services and channels furnished by the Western Union Telegraph Company to its customers under its tariffs for use in voice or alternate voice-data, voice-teleprinter, or facsimile-voice transmission may, when used for voice transmission and terminated at both ends by the Telephone Company as part of a service provided by the Telephone Company to the same customer under this tariff, be connected for exchange and MTS.

1.7 Connection to Private Line Service

1.7.15 Connections of Services Furnished by the Telephone Company with Certain Facilities of the Western Union Telegraph Company

- B. Channels within a communications base capacity furnished by the Telephone Company to the Western Union Telegraph Company for use by the latter as part of its plant in furnishing channels within a communications base capacity under its tariffs may also, when connected at one end by the Telephone Company in one exchange and used for voice transmission, be connected at the other end to a Telephone Company central office in a different exchange for foreign exchange telephone service in the latter exchange. These channels may be extended by means of channel extensions of telephone grade furnished to the Western Union Telegraph Company by the Telephone Company from a Telephone Company central office in either exchange or to a Telephone Company central office in another exchange, for foreign exchange telephone service.
- C. Private line services utilizing Series 2000 or Series 3000 channels furnished by the Telephone Company may be connected when used for voice transmission with channels for voice transmission, or channels for alternate voice-data or voice-teleprinter or alternate facsimile-voice transmission, when used for voice transmission provided by the Western Union Telegraph Company under that Telephone Company's tariff. The types of channels furnished are shown in Exhibit 1.7.15-1.
- D. The rates and charges to the customer for Telephone Company provided facilities are in addition to the charges made by the Western Union Company for the services and channels which it provides.
- E. All arrangements concerning the Western Union facility are made by the customer with that carrier.
- F. Private line services utilizing Series 5000 channels may be connected, when used for voice transmission, with similar channels provided by the Western Union Telegraph Company under the conditions specified in Section 1.7.15C.
- G. Terminal equipment and multi-line terminating systems connected to the private line services specified in Section 1.7.5 in accordance with Section 1.7.15 prior to January 1, 1980, may remain connected and be moved and reconnected for the life of the equipment without registration unless subsequently modified. New installations of terminal equipment and multi-line terminating systems subject to Part 68 of the FCCs rules and regulations connected to such private line service must meet the requirements of Part 68.
- H. New installations of or additions to terminal equipment and multi-line terminating systems subject to Part 68, connected to the private line services specified in Section 1.7.5 in accordance with Section 1.7.15 must meet the requirements of Part 68.

- 1. Private Line Service
- 1.7 Connection to Private Line Service

	Connections of Services Furnished by the Telephone Company with Certain Facilities of the Western Union Telegraph Company	
Exhibit 1.7.15-1 Types of Channels Furnished		
Channel Type	Service(s)	
2001	Voice, Alternate Voice and Data, Alternate Voice and Teletypewriter, Alternate Voice and Remote Metering, Supervisory Control and Miscellaneous Signaling, Alternate Voice and Remote Operation of Mobile radio telephone systems (when not used for remote operation), Voice used alternately for foreign exchange service (when not used for foreign exchange service), Connections of private voice intercommunicating systems.	
3001	Alternate Voice and Remote Metering, Supervisory Control and Miscellaneous Signaling.	
3002	Alternate Voice and Data.	

1. Private Line Service

1.8 Application of Rates and Charges

1.8.1 Change in Service Arrangement

A. When a change in service arrangement involves continued use of facilities furnished by the Telephone Company, NRCs do not apply to the facilities continued in use. The minimum service period for the facilities continued in use is determined from the date of initial installation.

1.8.2 Temporary Surrender of Service

A. When, at the request of the Telephone Company, service is temporarily surrendered by the customer, credit is provided at the proportionate monthly contract charge in half hour multiples for each half hour or major fraction thereof for the period the service is surrendered. For the purpose of determining the amount of credit every month is considered to have 30 days.

1.8.3 Suspension of Service

- **A.** Upon request of the customer, private line service and associated equipment, except Series 5000 channels, that can be made inoperative without affecting other associated services of an installation may be suspended after the initial month of service subject to the following.
- 1. The monthly rate applies if the period of suspension is 15 or fewer days.
- 2. The reduction of rate on account of the suspension of service applies during a total of not more than nine months during any one calendar year.
- 3. More than one period of suspension may be permitted in any one calendar year provided at least one month's full charge is paid for service furnished between periods of suspension.
- 4. The monthly rate during the period of suspension is 50% of the monthly rate for the service suspended. A minimum charge equal to 50% of the monthly rate applies to periods of suspension of less than 30 days. The combined charge for one month for both suspension of service and regular service cannot exceed the monthly rate for service if the service were not suspended.

1.8.4 Regular Working Hours

A. Rates and charges reflect that work will be performed during regular working hours and that work once begun will not be interrupted by the customer, authorized user, or joint user. If the customer, authorized user, or joint user requests work to be performed outside of regular working hours (either to meet their convenience or because the time allowed is insufficient to permit completion during regular hours), or if the customer, authorized user, or joint user interrupts work that has begun, the customer may be required to pay any additional costs incurred.

1. Private Line Service

1.8 Application of Rates and Charges

1.8.5 Mileage Measurements

- A. Intraexchange Mileage measurements are determined as set forth in Section 2 for the appropriate Series and Type channel involved.
- B. Interexchange Mileage—For the purpose of determining rate distances, a V&H coordinate system is used. The V&H system consists of a series of coordinates which represents a theoretical grid of vertical and horizontal lines covering the State of New Hampshire. The location of a rate center expressed in latitude and longitude is converted mathematically to its grid location, that is Vertical V and Horizontal H coordinates. These coordinates permit calculation of the rate mileage distance between any two rate centers.
- 1. Two Point Service—The interexchange mileage is the airline distance per mile between rate centers of the service points (exchanges at which connection is made with local channels.
- **a. Series 6000 Channels**—The interexchange mileage is the airline distance (fractional miles being considered as full miles) between rate centers of the service points (exchanges at which connection is made with local channels) mathematically determined in accordance with V&H coordinate system of calculation of the distance between rate centers.
- 2. Multi-point Service—The interexchange mileage for multi-point service is that combination of airline distances connecting service points which will produce the lowest total interexchange mileage charge. The airline distance between each pair of points is determined in accordance with Section 1.8.5B1.
- **a. Series 6000 Channels**—The interexchange mileage for Series 6000 multi-point service is that combination of airline distances connecting service points which will produce the lowest total interexchange mileage charge. The airline distance between each pair of points is determined in accordance with Section 1.8.5B1 for Series 6000 channels. As an exception, when the customer requests that the service points be connected in a specified sequence, the interexchange mileage is the shortest airline mileage determined in accordance with the Section 1.8.5B1 for Series 6000 channels which will connect the service points in the specified sequence.
- C. Local Channels Schedule F—The local channel mileage is the airline distance in quarter miles (fractional quarter miles being considered as full quarter miles) measured directly on a standard map between the following locations.
- 1. Two stations
- 2. The studio and first distributing center or point of connection with an interexchange channel
- 3. Between distributing centers, using the shortest airline distance connecting all distributing centers
- 4. A distributing center and each station served therefrom.

2. Private Line Services

2.1 Series 1000 Channels

Rates and charges for services explained herein are contained in Part M, Section 2. Service charges referred to herein are explained in Part A, Section 3 and contained in Part M, Section 1. The regulations contained in Section 1 apply in addition to the regulations specified herein.

2.1.1 Availability

- A. Intraexchange channels are no longer available under the following situations. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.
- 1. Extension of channels between points in different buildings not on the same premises
- 2. Channels between points within a building involving the same or different premises
- 3. Between points in different buildings on the same premises
- 4. Extending additional points in the same building of channels described herein.
- B. Extending of interexchange local channels (Types 1001 and 1005) is no longer available. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.

2.1.2 Description

- A. Series 1000 channels are furnished for operation on a two point or multi-point basis and for operation on any two point basis of a multi-point channel.
- B. Special Signaling—Two-wire metallic or other effectively equivalent unconditioned channels are furnished for use with Telephone Company provided service arrangements or with customer provided signaling equipment in accordance with Telephone Company technical reference specifications. These channels are furnished for remote metering, supervisory control or miscellaneous signaling arrangements. Metallic interoffice facilities and metallic interexchange facilities for these services are in continually decreasing supply and are furnished subject to availability. Construction of facilities expressly for these services is not contemplated.
- 1. Type 1001—These channels are furnished to accommodate transmission up to 30 bands for remote metering, supervisory control, and miscellaneous signaling purposes.
- C. Sub Voice—Two point or multi-point channels suitable for transmission up to 150 bands are furnished for use with terminal equipment as specified below. These channels are provided for use with data and teletypewriter equipment.
- **1.** Type 1005—Up to 150 baud operation.

2. Private Line Services2.1 Series 1000 Channels

2.1.3 Regulations

- A. Series 1000 and Series 1005 channels, when furnished for remote metering, supervisory control or miscellaneous signaling purposes, may be used for such purposes as indicating readings of meters at distant locations, operating switches which in turn perform some desired operation, or operating special signaling devices of the customer. Station equipment and station wiring for remote metering, supervisory control or miscellaneous signaling purposes, other than the equipment necessary for the suitable termination of the channel on the customer's premises shall be provided by the customer.
- 1. Type 1005 channels when used for teletypewriter or data services may be connected to extend service to another customer when the connection is made according to Section 1.7.15.

2.1.4 (C) Type 1009 Channel **Description**—A Type 1009 channel is a point-to-point two-wire metallic circuit furnished for transmission between an internet service provider and its end user customer. It consists of two non-loaded local loop channels that have been cross-connected together in a Telephone Company central office. B. **Availability** (P) (D) Type 1009 channels are provided on an intraexchange basis only within the area served by a (T) single serving wire center and subject to the availability of suitable facilities (i.e., metallic and nonloaded). The Telephone Company will not construct new facilities in order to provide Type 1009 channel service. Type 1009 channels are provided over non-loaded cable facilities. In the event only loaded (T) facilities are available or bridged tap removal is desired, the customer may request load coil or bridged tap removal when ordering service. Multipoint service is not offered in connection with Type 1009 channels. (T) C. Liability 1. Where Type 1009 channels are provided over existing facilities, the Telephone Company is not obligated to continue providing Type 1009 channels where rearrangements of facilities for modernization, growth, or maintenance necessitate the elimination of such facilities (as in the case of fiber placement). In such cases, the Telephone Company will provide the customer sixty days' notice of cancellation of service. The Telephone Company will not be responsible to the customer or otherwise if changes to any Telephone Company facilities (such as the replacement of a cable section) render any equipment or systems of the customer obsolete, affect performance, or require the customer to incur any expenses whatsoever, including but not limited to alterations of customer equipment or system or charges associated with necessary or appropriate changes in services provided by the Telephone Company.

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President-NH

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2. **Private Line Services**

2.1 Series 1000 Channels

Type 1009 Channel

(C)

C. (Continued)

2.1.4

Type 1009 channels provide end-to-end direct current continuity. The provision of Type 1009 channels is made with no guarantees, including but not limited to whether it is capable of supporting a particular technology, the data rate that can be achieved, or whether a particular technology will work over a particular Type 1009 channel.

D. Responsibility of the Customer

- 1. Signal power limits in Section 1 preceding are not applicable to Type 1009 channels. Equipment attached to Type 1009 channels at all times shall conform to the signal power limitations, transverse balance requirements and all other technical criteria adopted by the Administrative Council for Terminal Attachments (ACTA) in accordance with FCC Rules and Regulations in 47 CFR 68, shall be approved and labeled in accordance with 47 CFR 68 and shall be registered with ACTA.
- 2. The customer shall provide the following information to the Telephone Company at the time the Type 1009 channel is ordered or at such time equipment is subsequently changed.
- The ACTA approval number for equipment to be attached to the Type 1009 channel. a.
- The Spectrum Management Class per ANSI T1.417-2001 that the equipment will operate under b. when attached to the Type 1009 channel.
- 3. If interference with other Telephone Company services should occur, the Telephone Company will request the customer to disconnect equipment attached to Type 1009 channels. The Telephone Company will allow the customer a reasonable opportunity to disconnect the equipment. If the interference remains unresolved after a reasonable opportunity to disconnect the equipment attached to Type 1009 channels, the Telephone Company will take the customer's Type 1009 channel out of service, if necessary, to restore the other Telephone Company service and advise the PUC that a particular customer's technology deployment is causing interference with other Telephone Company services.

2.1.5 **Application of Rates and Charges**

- Premises Work Charges apply as appropriate and are in addition to the applicable monthly rates A. and NRCs for Series 1000 channels.
- Moves -- Premises work charges apply as appropriate. В.
- Switching Arrangements— Charges will be based on cost.
- Loop Conditioning— NRCs apply for removal of load coils and bridged taps for Type 1009 D. channels.
- Special construction charges apply as determined on a case by case basis as specified in Part A, Section 2 in lieu of tariffed rates and charges for loop conditioning for those Type 1009 channels that exceed 27,000 feet in length.
- Cancellation of Type 1009 Channel—All NRCs associated with an order for service and/or for loop conditioning apply whether or not order is cancelled.

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2. Private Line Services

2.2 Series 2000 Channels

2.2.1	Availability
Α.	Intraexchange channels furnished between points within a building involving the same or different premises, and, between points in different buildings on the same premises are no longer available. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.
В.	Extension of intraexchange channel Types 2001 and 2002 between points in different buildings not on the same premises or extension of Type 2001A between the main building and other buildings on the same continuous property is no longer available. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.
C.	Extension of a Type 2001 interexchange local channel or additional local channel in the same exchange on the same circuit is no longer available. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.
1.	Extension of such channels to an additional point in the same building, or to another building on the same premises installed before January 1, 1987 with additional termination within a building or to another building on the same premises are furnished to existing customers at present locations only in the same or lesser quantities.
D.	Extension of a Type 2006 interexchange channel between buildings on the same premises is no longer available. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.
E.	Type 2001A extension lines between the main building and other buildings on the same continuous property of one customer; or, from a customer's service to a secretarial service board, or to an answering location in the same building where the line terminates in a multi-line telephone of another customer, are no longer available. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.
F.	Type 2006A intraexchange channels for extension lines between buildings on the same premises are no longer available. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.

2. Private Line Services

2.2 Series 2000 Channels

2.2.2 Description

- A. Series 2000 channels are furnished for operation on a two point or multipoint basis. The various types of services furnished are as follows.
- 1. Type 2001 channels are furnished for voice transmission not involving connection of a PBX or other arrangement to a local or toll central office line to form a through connection over the private and exchange service lines.
- 2. Type 2001A channels are furnished for voice transmission as bridged connections to exchange service, WATS lines, or as PBX (or similar) off-premises main and extension station lines, which may require signaling arrangements for operation over channels with specified resistance, with the capability of connection at a PBX, (or similar) system to a local or toll central office line to form a through connection over such a line.
- 3. Type 2001B channels are furnished for voice transmission provided with or without signaling arrangement(s) to interconnect PBX (or similar) systems, Centrex systems or PBX (or similar) and Centrex systems.
- 4. Type 2002 channels are furnished for remote control and operation of mobile radio-telephone systems.
- 5. **Type 2006** channels are furnished for voice transmission in connection with foreign exchange service.
- 6. Type 2006A channels are furnished for voice transmission in connection with foreign central office service.

2.2.3 Regulations-Type 2001

- A. These channels may be used for conference service so that persons at three or more telephones may converse simultaneously.
- B. These channels may be used for data transmission subject to the provisions herein and in Section 1.
- C. These channels may be connected to extend service to another customer when the connection is made in accordance with the provisions of Section 1.
- D. These channels may be used to provide school to home service. School to home service equipment must include combined amplifier-speaker-microphone equipment for use in a classroom and a home, or hospital. This equipment, at either location, may be fixed or portable.
- E. These channels may be furnished between premises of the customer for the purpose of connecting terminal equipment.

2. Private Line Services

2.2 Series 2000 Channels

2.2.3 Regulations-Type 2001

- F. Telephotograph equipment for the transmission and reception of pictures and similar material may be used in connection with a private line for voice communications under the conditions that private line telephone service is not represented as adapted to the telephotographic transmission of pictures and similar material.
- 1. Liability—The use of private line service for telephotographic transmission is permitted only on the condition that the Telephone Company is not responsible for damages arising out of mistakes, omissions, interruptions, delays, or errors or defects in transmission, except those caused by its failure to furnish facilities suitable for ordinary telephone service or its failure to maintain and operate the facilities in a manner proper for telephone service. The liability of the Telephone Company for damages caused by its failure to furnish facilities suitable for ordinary telephone service or its failure to maintain and operate the facilities in a manner proper for telephone service is as set forth in Section 1.
- G. Service Interruptions—Credit will be allowed only as provided in Section 1.6.

2.2.4 Regulations-Type 2001 Extension Service Associated with Government Service

- A. Interexchange Channels—When stations of an extension service are in exchanges in which there is no station on the Government service, interexchange mileage charges apply for the interexchange channel connecting such exchanges with the nearest exchange in which there is a station on the Government service.
- B. Local Channels—Intraexchange channel rates and charges for two local channels to the customer's building apply for each station connected to a central office on a service arranged for communication among three or more stations at one time, except that where stations of an extension service are located on the same premises as a station on the Government service, charges for connecting arrangements specified herein will apply in lieu of the charges for local channels.
- C. Connecting Arrangements—When one or more extension services are located on the same premises but in a different building than a station on the Government service, rates and charges are applicable for each extension service.
- D. Move and change charges apply as appropriate.

2. Private Line Services

2.2 Series 2000 Channels

2.2.5 Regulations-Type 2001A

- A. These channels are classified as extension lines and are furnished in connection with main telephone exchange service, WATS line, and PBX (or similar) and Centrex systems, or between premises of the customer for the purpose of connecting PBX (or similar) or Centrex systems to other terminal equipment. Extension lines are furnished when the following situations occur.
- 1. The main exchange service is extended to a different premises or a PBX (or similar) station line is at a different premises from which the associated PBX (or similar) system is located.
- 2. A Centrex station line is located in a building other than the principal premises.
- B. Extension lines are designed to meet normal transmission and signaling requirements and will be furnished when practicable and where facility conditions permit.
- C. Signaling Arrangements—Extension lines furnished for Centrex or PBX (or similar) off-premises main or extension station lines require signaling arrangement(s) as follows.
- **1. Type A**—Furnished for use with Centrex or Class A PBX (or similar) station ports capable of operation over channels with resistance in the range of 0–199 ohms
- 2. **Type** B—Furnished for use with Centrex or Class B PBX (or similar) station ports capable of operation over channels with resistance in the range of 200–899 ohms
- 3. Type C—Furnished for use with Centrex or Class C PBX (or similar) station ports capable of operation over channels with resistance in the range of 900 ohms or more.
- D. Interexchange extension lines may be associated with measured or unlimited service in accordance with the offering in the exchange and subject to the general regulations governing the furnishing of measured and unlimited service on the same premises as specified in Part A, Section 5.
- E. Extension lines provided in connection with Centrex service are furnished subject to the regulations specified in Part H.
- F. These channels may be used for data transmission subject to the provisions herein and in Section 1.

2.2.6 Regulations-Type 2001B

- A. These channels are classified as tie lines. They are not furnished to interconnect terminal equipment or multi-line terminating systems. They are furnished to interconnect the following systems or premises.
- 1. PBX or similar systems of the same or different customers in different buildings and premises not on the same continuous property
- 2. The principal premises of a Centrex system and its satellite service location
- 3. The principal premises of separate Centrex systems of the same or different customers

2. Private Line Services

2.2 Series 2000 Channels

2.2.6	Regulations-Type 2001B
A.	(Continued)
4.	The principal premises of a Centrex system and a PBX system of the same or different customers.
В.	Tie lines are designed to meet normal transmission and signaling requirements and will be furnished where practicable and where facility conditions permit. Tie line connections to central office trunk lines may be established at either end but not both ends simultaneously.
C.	Dial-type tie lines require E&M signaling arrangement(s) to provide an E&M signaling interface with switching equipment located on the customer's premises when furnished for use between two Centrex or PBX (or similar) systems, and, between a PBX (or similar) system and a Centrex system, in which case only one signaling arrangement is required.
D.	Interexchange tie lines may be associated with measured or unlimited PBX (or similar) systems or Centrex in accordance with the offering in the exchange and are subject to the regulations contained in Part A, Section 5 governing the furnishing of measured and unlimited service on the same premises.
E.	Tie lines provided in connection with Centrex service are furnished subject to the regulations specified in Part H.
F.	These channels may be used for data transmission subject to the provisions herein and in Section 1.

2.2.7 Regulations-Type 2002

A. These channels are furnished between specified locations for the remote operation and control of private land radio-telephone stations established for communication with mobile units. Channels are suitably terminated on the premises of the customer by the Telephone Company.

2.2.8 Regulations-Type 2006

- A. These channels are furnished to permit customers to obtain individual line or trunk line connection from an exchange other than that normally serving the area in which the customer is located.
- B. The regulations applicable to these arrangements are as shown for foreign exchange service in Part A.
- C. These channels may be used for data transmission subject to the provisions herein and in Section 1.

Private Line Services Series 2000 Channels 2.

2.2

2.2.9	Regulations—Type 2006A
Α.	These channels are furnished within an exchange to provide exchange service from a different central office other than that normally serving the area in which the customer is located.
В.	The regulations applicable to this arrangement are as specified for foreign central office service in Part A.
C.	These channels may be used for data transmission subject to the provisions herein and in Section 1.

2.2.10 Application of Rates and Charges			
A.	Rates and charges specified elsewhere in this tariff for main telephone exchange service are applicable with channel Types 2001A, 2006 and 2006A.		
В.	Premises Work Charges apply in addition to the monthly rates and NRCs for Series 2000 service.		
C.	For Type 2006 interexchange channels, the mileage rate between rate centers is limited to three exchanges.		
D.	The rates for Series 2000 channels contemplate service involving connection between telephones connected to the line and arranged for hand generator signaling. Signaling arrangements are available.		
E.	Moves—Premises work charges apply as appropriate.		
F.	Changes—Change of equipment incurs charges as for a new installation.		

2. Private Line Services

2.3 Series 3000 Channels

2.3.1 Availability

- A. Intraexchange channels furnished between points within a building involving the same or different premises, or, between points in different buildings on the same premises are no longer available. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.
- B. Extension of a Type 3001 and 3002 intraexchange and/or interexchange local channel or additional local channel in the same exchange on the same circuit is no longer available. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.

2.3.2 Description

- A. Series 3000 channels are designed to meet certain specifications based on Telephone Company standards of measurement for data transmission and for remote metering, supervisory control, and miscellaneous signaling purposes as set forth herein. These channels are not suitable for the transmission of direct current pulses. The number of stations that may be connected and the distance over which transmission is possible may be limited by operating and transmission factors on channels furnished for data transmission.
- B. The channels may also be furnished to connect terminal equipment or communications systems to other terminal equipment or communications systems.
- C. Channels are furnished for operation on a two point or multi-point basis or for operation on any two point portion of a multi-point channel. The transmission characteristics and the various types of services furnished within this series are as follows.
- 1. Type 3001—Approximate bandwidth of 300 to 3,000 Hz. Furnished for remote metering, supervisory control and miscellaneous signaling purposes.
- 2. Type 3002—Approximate bandwidth of 300 to 3,000 Hz. Furnished either as an unconditioned or conditioned channel for data transmission. A channel conditioning arrangement is required when the channels are used for either C1, C2 or D1 data transmission. When the channel equipped with Type D1 conditioning is utilized for voice communications, the Telephone Company does not guarantee that the channel will be suitable for voice transmission.

2.3.3 Regulations-Type 3001

A. These channels are furnished for indicating readings of meters at distant locations, operating switches which in turn perform some desired operation, or operating special signaling devices of the customer.

2. Private Line Services

2.3 Series 3000 Channels

2.3.4 Regulations-Type 3002

- A. These channels when used for data transmission require terminal equipment (data sets) to condition signals generated by apparatus furnished by the customer to signals suitable for transmission on the channel and to condition signals received from the channel to signals for delivery to apparatus furnished by the customer.
- B. These channels may be used for normal black and white telephotograph (facsimile) transmission purposes without the use of terminal equipment. When picture transmission refinements are required, suitable terminal equipment should be used.
- C. Conditioning—When Type 3002 channels are used for C1, C2 or D1 data transmissions, the following conditioning arrangements are required. Note that + means more loss.
- 1. C1—The envelope delay distortion must not exceed between 1,000 or 2,400 Hz, a maximum difference of 1,000 microseconds. The loss deviation with frequency (from 1,000 Hz reference) must not exceed between 1,000 and 2,400 Hz, -1db to +3db, or between 300 and 2,700 Hz, -2db to +6db.
- 2. C2—The envelope distortion must not exceed between 1,000 or 2,600 Hz, a maximum difference of 500 microseconds, between 600 or 2,600 Hz, a maximum difference of 1,500 microseconds, or between 500 or 2,800 Hz, a maximum difference of 3,000 microseconds. The loss deviation with frequency (from 1,000 Hz reference) must not exceed between 500 and 2,800 Hz, -1db to +3db, or between 300 and 3,000 Hz, -2db to +6db.
- 3. D1 (High Performance Data Conditioning)—For a two point channel Signal to C-Notched noise ratio is 28db. Nonlinear distortion is signal to second order distortion of 35db or, signal to third order distortion of 40db. Type D1 is furnished subject to the availability of suitable facilities.

2.3.5 Application of Rates and Charges

- **A.** Premises Work Charges apply in addition to the monthly rates and NRCs for Series 3000 service.
- B. Bridging Charges apply on multi-point channels.
- C. Moves—Premises work charges apply as appropriate.

2. Private Line Services

2.4 Series 5000 Channels

2.4.1 Description

- A. Series 5000 channels are furnished between specified locations for voice, telephotograph (facsimile), teletypewriter, data transmission, remote metering, supervisory control, miscellaneous signaling and other purposes for which terminating arrangements are provided.
- B. Series 5000 channels are furnished for half duplex or duplex operation, on a two point or multi-point basis.

2.4.2 Base Capacity

- A. Availability—The following base capacity installed on or before April 2, 1989 may be continued for existing customers at present locations in the same or fewer quantities; this includes changing the base capacity to a lower type only. New installations will be provided only as Series 1000, 2000 and 3000 channels.
- B. Series 5000 channels provide base capacity for transmitting various forms of electrical communication up to the limits specified for the various types as set forth herein and terminating arrangements necessary for the utilization of such capacity.
- C. Within the limits of a base capacity the customer may order as many individual channels of lesser capacity arranged for use as required. A channel is considered arranged for use when the necessary terminating or connecting arrangements are furnished pursuant to the customer's order.
- D. Base capacity denotes the potential for communication channels and services which can be realized only with the use of terminating arrangements. Base capacity, with appropriate terminating arrangements, is provided for use as a wideband channel or for use as individual channels of lesser capacity which in total do not exceed the equivalent voice grade capacity specified for each type. Base capacity is furnished in a manner elected by the Telephone Company, whether by wire, radio or a combination thereof and whether or not by means of a single facility or route.
- E. For each base capacity the Telephone Company undertakes to provide only that portion of the maximum base capacity which the customer orders as channels arranged for his use. Additional channels up to the maximum of the base capacity will be provided and arranged for use at the customer's request subject to the availability of suitable terminating or connecting arrangements. The various types and classification of base capacity furnished within Series 5000 channels is as shown in Exhibit 2.4.2-1.
- 1. Within the maximums specified in Exhibit 2.4.2-1 the base capacity made available to the customer in each classification is determined by the number and type of terminating or connecting arrangements furnished from time to time pursuant to his order and is limited to the capacity so determined.

- Private Line Services Series 5000 Channels 2.
- 2.4

2.4.2 Base Capacity			
Exhibit 2.4.2-1 Series 5000 Channel Base Capacity Types and Classifications			
Base Capacity	Max. Equivalent Carrier Spectrum Assignment	Max. Equivalent Voice Grade Channels	
Туре 5500	48 Kilocycles Per Second	12	
Туре 5600	96 Kilocycles Per Second	24	
Type 5700	240 Kilocycles Per Second	60	
Type 5800	1000 Kilocycles Per Second (approx.)	240	

2. Private Line Services

2.4 Series 5000 Channels

2.4.3 Terminating Arrangements

- A. Terminating arrangements for use with the various types of base capacity are furnished as service terminals for use as a wideband channel or as service terminals for use as individual channels of a lesser capacity. A service terminal is required for each service arranged for use by the customer, for each connection of service to a station, or for each connection of service to a Telephone Company office for the purpose of establishing a channel in connection with foreign exchange service. When a channel switching arrangement is provided, each station at the switching point requires a service terminal for each of the channels to which it is connected and which can be operated as a separate channel.
- 1. Where service terminals for use as individual channels of a lesser capacity are furnished, the Type numbers as shown in Exhibit 2.4.3-1 are assigned by reference to the individual channel as if it were furnished under Series 1000, 2000 or 3000 channels by dropping the second-digit of the regular Type number and adding a five as the first-digit of the new four-digit Series 5000 Type number.

B. | Moves and Changes

- 1. When a service terminal is moved to a different building, NRCs apply as well as premises work charges. When a service terminal is moved to a new location with the same building, one-half the NRCs apply. Premises work charges also apply.
- 2. When a change is made in the classification of the service terminal, a NRC applies for each service terminal that is changed or added new in the base capacity.
- **a.** When a customer's existing channels and services become channels and services of a base capacity, NRCs for service terminals do not apply provided service terminals of the same classifications are continued in use without interruption.

C. Service Terminals for Use as a Wideband Channel

- 1. Type 5501—Service terminals to accommodate the transmission of data signals at a rate of 40,800 bits per second in sequence, including one telephone channel termination for coordination. The channels developed by each service terminal have the total equivalent of twelve telephone channels.
- 2. Type 5502—Service terminals to accommodate the transmission of data signals at a rate of 50,000 bits per second in sequence, including one telephone channel termination for coordination. The channels developed by each service terminal have the total equivalent of twelve telephone channels.

D. Service Terminals for Use as Channels of a Lesser Capacity

1. Voice—Service terminals suitable for terminating channels having transmission characteristics and with terminating arrangements similar to those furnished under Series 2000 and 3000 (Type 3001 only) channels. Voice service terminals are Types 5201, 5201A, 5201B, 5202, 5206 and 5301.

2. Private Line Services

2.4 Series 5000 Channels

2.4.3 Terminating Arrangements

D. (Continued)

- 2. Teletypewriter—Service terminals suitable for terminating channels having transmission characteristics and with terminating arrangements similar to those for channels furnished under Series 1000 channels. Teletypewriter service terminals are Types 5101, 5102A, 5102B, 5105 and 5106.
- a. Except for Type 5106 channels twelve channels or any portion thereof or a combination, not exceeding twelve channels, between the same pair of rate centers, have the equivalent of one voice grade channel. Four Type 5106 channels or any portion thereof not exceeding four channels, between the same pair of rate centers, have the equivalent of one voice grade channel.
- 3. Data—Service terminals suitable for terminating channels having transmission characteristics and with terminating arrangements similar to those for Series 3000 channels furnished for data transmission. Each channel has the equivalent of one voice grade channel. Data service terminals are Type 5302.
- 4. Charges for the first station in an exchange or for a connection to a Telephone Company office on each service in use are incurred per service terminal. Charges for the second or subsequent station in an exchange on any individual service are incurred per service terminal.

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- Private Line Services Series 5000 Channels 2.
- 2.4

2.4.3 Terminating Arrangements				
Exhibit 2.4.3-1 Terminating Arrangements				
Series	Туре	Equivalent 5000 Series Type		
1000	1002	5102		
2000	2001	5201		
3000	3001	5301		

2. Private Line Services

2.4 Series 5000 Channels

2.4.4 Connecting Arrangements

- A. A connecting arrangement is required for each connection of a channel furnished under this series to the following channels or arrangements.
- 1. An interexchange channel furnished under other series, except where the connection is by means of a switching arrangement
- 2. An alternate use arrangement except when a connecting arrangement is furnished for the preceding purpose, or a service terminal is provided.
- B. A connecting arrangement charge equal to the service terminal charge for the first station on the channel applies for each connecting arrangement.
- C. When a customer wishes to make the connection at will, special charges apply for the function performed.

2.4.5 Station Arrangement

A. When Type 5106 interexchange channels are provided for use with teletypewriter service terminals, station arrangement regulations as specified for Type 1006 channels apply.

2.4.6 Channel Conditioning Arrangement

A. When Type 5302 interexchange channels are provided for use with data service terminals and used for either Type C1, C2 or D1 data transmission, channel conditioning arrangement charges as specified for Type 3002 channels apply.

2.4.7 Regulations

Except as otherwise provided herein, the following regulations apply as set forth for services of the same type and furnished for the same purposes under Series 1000, 2000 and 3000 services.

- A. Channels furnished within this series are provided only through the use of Series 5000 terminating or connecting arrangements provided by the Telephone Company. The customer cannot create additional channels from channels furnished under this series except that the customer can create additional channels from channels of voice grade or less to the extent permitted under the provisions of Section 1.
- B. Channels and terminating arrangements furnished for purposes specified herein are suitable for these purposes. While other uses are permitted, channels and terminating arrangements are not represented as being satisfactory for other uses.
- C. When a wideband channel is arranged for alternate use as channels of lesser capacity in accordance with regulations for alternate use, one voice grade channel will be associated with the wideband service terminal for coordinating purposes and this channel may not be suitable for other purposes.

2. Private Line Services

2.5 Series 6000 Channels

2.5.1 Availability

- A. Local Channels Schedule F—Channels or channel extensions within the same building, or between different buildings on the same premises are no longer available. Service arrangements for additional terminations within a building or to another building on the same premises installed before January 1, 1987 are furnished to existing customers at present locations only in the same or lesser quantities.
- 1. For all other channels, those channels within a program area where channels are furnished on a network between a studio and a distributing center, between a distributing center and a station or between distributing centers the total mileage is the sum of the local channel mileages.

2.5.2 Description

- A. Series 6000 channels are furnished for one-way program transmission in connection with loudspeakers and sound recording.
- B. Type 6002 Schedule D provides for the occasional use of program transmission facilities, without special operation and supervision, for the transmission of audio material within a frequency range from approximately 200 to 3,500 cycles per second. Transmission limitations permit the satisfactory transmission of the above frequency range only over limited distances. This type covers the provision of interexchange channel facilities and services, including the necessary bridging connections.
- C. Type 6003 Schedule C provides for the continuous use of program transmission facilities as described for Type 6002 preceding.
- D. Type 6004 Schedule B provides for the occasional use of program transmission facilities, with special operation and supervision, for the transmission of program material within a frequency range from approximately 100 to 5,000 cycles per second. This type covers the provision of interexchange channel facilities and services, including such station connections as may be required.
- E. Type 6005 Schedule A provides for the continuous use of program transmission facilities as described for Type 6004.
- F. Type 6006 Schedule BB provides for the provides for the occasional use of program transmission facilities, with special operation and supervision, for the transmission of program material within a frequency range from approximately 50 to 8,000 cycles per second. This type covers the provision of interexchange channel facilities and services, including such station connections as may be required.
- G. Type 6007 Schedule AA provides for the continuous use of program transmission facilities as described for Type 6006.
- H. Local Channels Schedule F provides for program transmission facilities within an exchange are between the following locations.
- 1. Two stations

2. Private Line Services

2.5 Series 6000 Channels

2.5.2 Description H. (Continued) 2. The studio and the first distributing center or point of connection with an interexchange channel 3. Distributing centers 4. A distributing center and each station served therefrom.

2.5.3 Regulations

The following regulations apply to Series 6000 channels furnished between points within the State of New Hampshire.

- A. Provision of Facilities—All station equipment and station wiring, other than any equipment necessary for the suitable termination of the channel facilities on the premises of the customer and his patrons, must be provided by the customer or his patron.
- B. Connection with Telephone Services—Series 6000 channel facilities provided herein are the only channel facilities furnished by the Telephone Company for program transmission in connection with loudspeakers and sound recording. Facilities furnished in connection with exchange, MTS, or private line telephone services may neither be connected with program transmission channels or be connected directly or indirectly with loudspeaker or sound recording equipment associated with program transmission channels. Channels furnished in connection with loudspeakers and sound recording may be interconnected with channels furnished in connection with radio broadcasting.
- C. Connection with Other Channels of the Telephone Company and with Channels of Others
- 1. Connections of channels may be made by a customer (or arranged for by a customer) at a studio or audit broadcasting transmitter, provided that the connections will not result in connection, either directly or indirectly, for through transmission of Telephone Company interexchange channels with interexchange channels of others, except as specifically covered in Section 2.5.3C2 and further provided, that no interference with or impairment of service rendered by the Telephone Company will result. Connection with Telephone Company interexchange channels can be made by a customer only via local channels of the Telephone Company.
- 2. Local channels of the Telephone Company may be connected with interexchange channels of others when the channels operate on frequencies assigned for frequency modulation broadcasting (FM broadcast channels).

2. Private Line Services

2.5 Series 6000 Channels

2.5.3 Regulations C. (Continued) 3. Program transmission channels in connection with loudspeakers may be interconnected at Telephone Company premises to form a network for the distribution of program material to a number of loudspeaker locations. The points at which interconnection of such channels are made are called distributing centers. 4. Amplifying equipment provided by the customer and located at the customer's studio may be used to connect channels furnished under the various schedule classifications.

2.5.4	Program Exchange	Areas (PEA)		
A.	PEAs denote the area ser		2.	

2.5.5	Application of Rates and Charges
A.	Premises work charges apply in addition to all other applicable rates and charges for service and associated equipment.
В.	The maximum charge applicable for occasional service within the period of one month is the charge for monthly service for similar grade facilities.
C.	The distributing center connecting arrangement NRC which applies for each connecting arrangement is not applicable for a channel connecting a customer's studio and a distributing center.

2. Private Line Services

2.6 Series 10000 Channels

2.6.1 Description

- A. Series 10000 channels are furnished to the customer by the Telephone Company for the purpose of extending communications systems to a premises of the customer or authorized user. Channels are furnished for operation on a two point basis.
- B. Type 10001—Approximate bandwidth of 300 to 3,000 Hz. Furnished, to the extent permitted by the normal transmission characteristics of this grade of channel, for types of transmission similar to those set forth for Series 1000, 2000 and 3000 channels.

2.6.2 Regulations

A. Type 10001—The customer's or authorized user's premises must be located 25 airline miles or less from the point at which the customer provided communications channel is connected to the Telephone Company entrance facility.

2.6.3 Application of Rates and Charges

A. Rates and charges for entrance facilities (Type 10001) will be determined on a case-by-case basis.

- 2. Private Line Services
- 2.7 Signaling Arrangements

2.7.1 Automatic Signaling

A. Signaling is normally provided by hand generators which are furnished without additional charge. Line equipment at the central office where facilities permit, regardless of the type of termination may be used as a signal arrangement in lieu of a hand generator.

- 2. Private Line Services
- 2.8 Dataphone Select-A-Station Service (DSAS)

2.8.1 Definitions

Data Station Selector (DSS)—A private line data switching device located in a Telephone Company central office which is capable of making connections between a four-wire input and up to 128 outputs, two-wire or four-wire, one at a time, under the control of the master station. DSS's are designated either primary or secondary.

Master Station—The master station comprises a customer provided terminal and a Selector Control Unit (SCU) located on the customer's premises. From this location, polling of each remote station is provided.

Primary Data Station Selector (PDSS)—A DSS which is connected to a SCU.

Remote Station—Any one of the many stations, located on a customer's premises, which can be polled from the master station via the associated DSS.

Secondary Data Station Selector (SDSS)—Any DSS connected to the PDSS that is arranged with the proper options.

Selector Control Unit (SCU)—The SCU is provided by the customer to transmit control signals to a DSS and/or receive supervisory signals from the DSS.

2.8.2 Description

- A. DSAS service is a multi-station, voice grade private line data service designed to establish point-to-point connections between a master station and a number of remote stations, one at a time.
- 1. The order of connections made from the master station to remote stations may be either sequential (fixed) or addressable (under the control of the master station). Direct transmission between remote stations is not possible, nor is simultaneous communications from the master to more than one remote station possible.
- B. DSAS requires the use of equipment and Type 3002 channels provided herein.
- C. DSAS is not designed to provide alternate voice-data transmission and this type of transmission is not supported. DC continuity between master and remote stations is not provided.

2.8.3 Service Arrangements

- A. DSAS arranged for sequential operation requires customer specification, prior to installation, of the order of connection from the DSS to the remote stations. The customer provided terminal equipment must be compatible with DSAS equipment. The customer also must specify one of the following sequential DSS options.
- 1. Automatic Step—A DSS arrangement in which the duration and order of connections are fixed.

- 2. Private Line Services
- 2.8 Dataphone Select-A-Station Service (DSAS)

2. Automatic Step with Reset—A DSS option in which the duration and order of connections are fixed, but the DSS resets to the beginning of the connection cycle upon command from the master station. A DSS with this option cannot be used as a PDSS in a tandem DSS arrangement. 3. Controlled Step—A DSS arrangement which allows the customer to have in-service control over the duration of the connection, however the order is fixed. B. DSAS arranged for addressable operation provides a DSS arrangement in which the

duration and order of connections are variables controlled by the master station.

2.8.4	Access Lines
Α.	Access from the PDSS to the customer provided SCU is obtained through a Type 3002 channel. Full duplex rates and charges apply for the channel. In addition, one four-wire channel connection is required per PDSS to SCU.
В.	Access to each SDSS from the PDSS is obtained through a Type 3002 channel. In addition, a four-wire channel connection is required at the PDSS and the SDSS.
C.	Access to each remote station from the Primary or Secondary Data Station Selector is obtained through a Type 3002 channel. Full or half duplex rates and charges apply in addition to the two-wire or four-wire channel connection rates and charges.

2.8.5	2.8.5 Application of Rates and Charges		
A.	Service charges apply in addition to the rates and charges for DSAS.		
В.	Change charges are applicable for changes from sequential operation to addressable operation, and, to change sequential options.		